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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/821,326	Applicant(s) LEACH ET AL.
	Examiner COURTNEY BROWN	Art Unit 1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 October 2008.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 23,29,31,96-99,106-111,114-118,121,122 and 129-153 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 23,29,31,96-99,106-111,114-118,121,122, and 129-153 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No./Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No./Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

This Office Action supersedes the Office Action filed on February 24, 2009.

Acknowledgement of Receipt/Status of Claims

This Office Action is in response to the amendment filed October 24, 2008.

Claims 23, 29, 31, 96-99, 106-111, 114-118, 121, 122, and 129-153 are pending in the application. Claims 1-22, 24-28, 30, 32-95, 100-105, 112-113, 119-120, and 123-128 have been cancelled. Claims 23, 29, 31, 96-99, 106, 108-110, 115, 116, 118, 122, 129, 130, 133, 134, 137, 138, 141, and 142 have been amended. Claims 145-153 are newly added. Claims **23, 29, 31, 96-99, 106-111, 114-118, 121, 122, and 129-153** are being examined for patentability.

Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

Double Patenting Rejections

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11, 12, and 20 of copending Application No. 11/299,522 in view of Heuer et al. (US Patent 5,874,025). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/299,522.

Copending '522 claims 11, 12 and 20 claim the same method as instant claim 23 except the instant claims require that the inorganic biocide is a copper compound. , However, Goettsche et al. teach a wood preservative for protection against wood-destroying fungi comprising the use of a copper compound such as copper hydroxide or basic copper carbonate (page 2,lines 4-7) and a triazole (abstract) such as tebuconazole (page 2,lines 19-31). From this extensive overlap of subject matter, one

of ordinary skill in the art would recognize that the same product is taught in the copending application 11/299,522.

This is a provisional obviousness-type double patenting rejection.

2. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-15 and 17-20 of copending Application No. 11/250,312 in view of Yoshihiro Oota et al. (JP published unexamined Patent Application No. S61-246002). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/250,312.

Copending '312 claims 12-15 and 17-20 claims the same method as instant claim 23 which is drawn to a method for preserving/fabricating a wood product by treating it with a composition comprising a copper bearing inorganic biocide and an organic biocide selected from the group consisting of azoles. The only difference is that the instant application requires the use of micronized particles . However, Yoshihiro Oota et al. teach a method for manufacturing treated timber having nonflammable inorganic compounds filtered into the tissues of said timber, wherein said nonflammable inorganic compounds are inorganic ultra micro particles of 0.1 μ m or less in diameter that is insoluble in water (see page 2, paragraph 7 of JP S61-246002). From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 11/250,312.

This is a provisional obviousness-type double patenting rejection.

3. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4-13 of copending Application No. 11/471,763. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/471,763.

Copending '763 claims 1 and 4-13 recite the same method as instant claims 23-48 which are drawn to a method of preserving wood comprising the use of micronized organic and inorganic biocides and specific dispersing agents. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 11/471,763.

This is a provisional obviousness-type double patenting rejection.

4. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6 and 9-13 of copending Application No. 11/849082. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/849082.

Copending '082 claims 6 and 9-13 recite the same method as instant claims 23-48 which are drawn to a method of preserving wood comprising the use of micronized

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organic and inorganic particle and specific dispersing agents. The difference between the invention of the instant application and that of '082 is that the instant invention does not require the use of a micronized zinc compound component. It would be obvious to one of ordinary skill in the art to not use a micronized zinc compound component depending on the intended use of the wood preservative composition. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 11/849082.

This is a provisional obviousness-type double patenting rejection.

5. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 9, 13-15, 17 and 23-24 of copending Application No. 11/126,839. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/126,839.

Copending "839 claims 9, 13-15, 17 and 23-24 claim the same method as instant claim 23 except the instant claims do not require the use of micronized pigment particles. It would be obvious to one of ordinary skill in the art to not use micronized pigment particles to provide color to the wood product being treated if a colored product is not desired. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application No. 11/126,839.

This is a provisional obviousness-type double patenting rejection.

6. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-23 of copending Application No. 11/526,765. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 11/526,765.

Copending "765 claims 12-15 and 17-20 claims the same method as instant claim 23 which is drawn to a method for preserving/fabricating a wood product by treating it with a composition comprising a copper bearing inorganic biocide and an organic biocide selected from the group consisting of azoles. The only difference is that the instant application does not require the use of a specific dispersing agent. One of ordinary skill in the art would be motivated not to use a dispersing agent because dispersing agents are used to stabilize micronized particles during storage and one of ordinary skill in the art would not use a dispersing agent for compositions that do not need to be stored. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 11/526,765 .

This is a provisional obviousness-type double patenting rejection.

7. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 54-

74 of copending Application No. 12/125166. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12/125166.

Copending "166 claims 54-74 recite the same method as instant claim 23 which are drawn to a method of preserving wood comprising the use of micronized organic and inorganic biocides . From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 12/125166.

This is a provisional obviousness-type double patenting rejection.

8. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 54-74 of copending Application No. 12/135167. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12/135167.

Copending "167 claims 54-74 recite the same method as instant claims 23 which are drawn to a method of preserving wood comprising the use of micronized organic and inorganic biocides. From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application . 12/135167

This is a provisional obviousness-type double patenting rejection.

9. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23-48 of copending Application No. 12/071707. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12/071707.

Copending "707 claims 23-48 recite the same method as instant claim 23 which are drawn to a method of preserving wood comprising the use of micronized organic and inorganic biocides . From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 12/071707.

This is a provisional obviousness-type double patenting rejection.

10. Claims 23, 29, 31, and 96-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 25-32 of copending Application No. 12/073452. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12/073452.

Copending "452 claims 25-32 recite the same method as instant claims 23-48, 57, and 96-105 which are drawn to a method of preserving wood comprising the use of micronized organic and inorganic biocides. From this extensive overlap of subject

matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 12/073452.

This is a provisional obviousness-type double patenting rejection.

11. Claim 23 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 57, 59, and 61 of copending Application No. 12/213529 in view of Yoshihiro Oota et al. (JP published unexamined Patent Application No. S61-246002). . Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced co-pending application 12/213529.

Copending claims 57, 59, and 61 and instant claim 23 claims the same except the instant claims require the use of dispersion in water. However, However, Yoshihiro Oota et al. teach a method for manufacturing treated timber having nonflammable inorganic compounds filtered into the tissues of said timber, wherein said nonflammable inorganic compounds are inorganic ultra micro particles of 0.1 µm or less in diameter that is insoluble in water (see page 2, paragraph 7 of JP S61-246002). From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application 12/213529.

This is a provisional obviousness-type double patenting rejection.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22, 23, 25-29, 31, 35-37, 69-99, 106-111, 114-118, 121, 122, and 129-144 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro Oota et al. (JP published unexamined Patent Application No. S61-246002 and Patent Application No.:S60-89422) and Goettsche et al. (AU-B-15117/92) in view of Walker (US Patent 5,438,034).

Applicant's Invention

Applicant claims a method for preserving a wood product comprising the step of contacting the product with a wood preservative composition comprising: (a) a dispersion in water of micronized particles of basic copper carbonate copper carbonate or copper hydroxide between 0.001 and 25 microns; and (b) one or more organic biocides selected from the group consisting of tebuconazole, alkylidimethylbenzylammonium chloride, dimethyldidecylammonium chloride, dimethyldideeaylammonium carbonate, and dimethyldidecylammonium bicarbonate.

***Determination of the scope and the content of the prior art
(MPEP 2141.01)***

Yoshihiro Oota et al. teach a method for manufacturing treated timber having nonflammable inorganic compounds filtered into the tissues of said timber, wherein said nonflammable inorganic compounds are inorganic ultra micro particles of 0.1 μm or less in diameter and is insoluble in water. Timber is immersed in a solution containing said

inorganic ultra micro dispersed particles and is dried said inorganic ultra micro particles are fixed within said tissues (see claim 1 on page 1 of JP S61-246002). Yoshihiro Oota et al. teach that any method can be used for immersion including pressurized processing and diffusion methods wherein said timber is impregnated with ultra micro inorganic compounds in the tissues, more specifically in the gap sections of cells (see page 2, paragraph 3 of page 2 bridging to paragraph 6 of JP S61-246002). As a result, Yoshihiro Oota et al. teach that the aforementioned treated timber has low flammability, antiseptic and insect-repellent qualities (see page 2, paragraph 7 of Yoshihiro Oota et al.) In Working Examples 1-7, Yoshihiro Oota et al. teach the use of inorganic compounds having a diameter of 0.005-0.08 µm.

Yoshihiro Oota et al. do not teach the use of the specific copper compound and organic biocide as claimed in the instant invention. For this reason the teaching of Goettsche et al. is joined.

Goettsche et al. teach a wood preservative for protection against wood-destroying fungi (Basidiomycetes, page1, lines 9-18) comprising the use of a copper compound such as copper hydroxide or basic copper carbonate (page 2,lines 4-7), a triazole (abstract) such as tebuconazole (page 2,lines 19-31) and quaternary ammonium compounds(page 3, lines 1 and 2). Goettsche et al. teach that said copper compounds can be used as water-soluble or **water-insoluble** compounds (page 2,lines 4-7). Reimer et al. also teach the use of impregnating solutions comprising copper which can be used for preserving wood by manual methods such as pressure and vacuum processes (page 7, lines 14-end).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Yoshihiro Oota et al. and Goetsche et al. is that the instant invention claims the specific use of didecyldimethylammonium carbonate and didecyldimethylammonium bicarbonate quaternary compounds as opposed to the ones taught by Goetsche et al . For this reason, the teaching of Walker is joined. Walker teaches the use of didecyldimethylammonium carbonate as a preferred carbonate quaternary compound for use in a wood preservative composition (column 5, lines 15-31). Walker also teaches the use of didecyldimethylammonium bicarbonate in a wood preservative composition (see claim 2 of Walker).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the teachings of cited references to devise a method for preserving wood and a wood product. The claims would have been obvious because the substitution of the insoluble inorganic compounds taught by Yoshihiro Oota et al. with the insoluble copper compounds and organic biocides used in the wood preservation composition of Goetsche et al. would have yielded predictable results to

one of ordinary skill in the art at the time of the invention. One would be motivated to make this combination in order to receive the expected benefit of having a wood product that excels at water resistance and stability while maintaining strength (see page 3 of Yoshihiro Oota et al.) as well as being resistant to fungal and insect attack due to the use of the inorganic copper biocide combined with an organic biocide.

Claims 116,122,130-132,134-136,138-140,142-144, and 149-153 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro Oota et al. (JP published unexamined Patent Application No. S61-246002) and Goettsche et al. (AU-B-15117/92)in view of Nicholas et al. (US Patent 5,462,589) and Bath et al. (US Patent 6,482,814 B).

Applicant's Invention

Applicant claims a method for preserving a wood product comprising the steps of contacting a wood preservative composition comprising a milled carbonate with a particle size of between 0.05 to 1 micron wherein said treatment produces a uniform distribution of copper throughout the wood product wherein after the contacting step, said wood product is resistant to decay and insect attack.

***Determination of the scope and the content of the prior art
(MPEP 2141.01)***

The teachings of Yoshihiro Oota et al. and Goetsche et al. are discussed above and hereby incorporated by reference.

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Yoshihiro Oota et al. and Goetsche et al. is that the instant invention requires that treatment of the wood product with the claimed wood preservative composition produces a uniform distribution of copper throughout the wood product that is resistant to decay and insect attack as opposed to just penetrating the wood product and protecting it from fungus attack. For this reason, the teaching of Nicholas et al. is joined. Nicholas et al. teach the use of synergistic biocidal compositions that combines a copper salt and an organic biocide (abstract) for protection of wood against insects (column 2, lines 62-end) and decay (column 5, lines 41-45) providing uniform distribution (column 11, lines 1-6).

Another difference between the invention of the instant application and that of Yoshihiro Oota et al. and Goetsche et al. is that the instant invention requires that the copper carbonate components are milled particles. For this reason, the teaching of Bath et al. is joined. Bath et al. teach biocidal compositions that can be used to protect wood (column 5, lines 54-63) wherein dispersions containing a solid component can be

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prepared by any means known to the art including bead, pebble or ball milling the solid in the liquid carrier until the desired particle size of the solid is attained. Bath et al. additionally teach that the preferable particle size is less than 20 microns, more preferably less than 10 microns and especially less than 5 microns (column 5, lines 27-33).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of cited references to devise a method for preserving wood and a wood product. One would be motivated to make this combination in order to receive the expected benefit of a dispersion liquid (which will inherently provide uniform distribution) containing biocidal insoluble micro particles to be filtered and fixed into the tissue of the wood product (Yoshihiro Oota et al., page 1) producing a wood product that is resistant to decay and insect attack.

Examiner's Response to Applicant's Remarks

Applicant's arguments, filed October 24, 2008, in reference to the rejection of claims 22,23,25-29,31,35-37,69-99,106-111,114-118,121,122, and 129-144 under 35 U.S.C. 103(a) as being unpatentable over Heuer et al. (US Patent 5,874,025) in view of Laks et al.(US Patent Application 2002/0051892 A1) and Walker (US

Patent 5,438,034) have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, filed October 24, 2008, in reference to the rejection of claims 116,122,130-132,134-136,138-140, and 142-144 under 35 U.S.C. 103(a) as being unpatentable over Iwasaki et al. and Heuer et al. (US Patent 5,874,025) in view of Nicholas et al. (US Patent 5,462,589 have been considered but are moot in view of the new ground(s) of rejection.

The claims remain rejected.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the ElectronElectronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is

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571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown
Patent Examiner
Technology Center 1600
Group Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616